



California's Marine Invasive Species Program

California State Lands Commission, Marine Facilities Division

Fouling Removal and Hull Husbandry Reporting

What is hull fouling?

Fouling consists of organisms that attach or associate with the submerged portions of hard structures, including ships. These include physically attaching species as well as mobile organisms that take shelter amongst attached organisms, such as worms, juvenile crabs, and amphipods (shrimp-like animals).



Photo by Chris Scianni, CSLC

California's legal definition of hull fouling : "...the attachment or association of marine organisms to the submerged portion of a vessel or its appurtenances, including, but not limited to, sea chests, propellers, anchors and associated chains." (California Public Resources Code Section 71200 (h))



Photo by Lynn Takata, CSLC

Why is hull fouling a concern?

When vessels move from port to port, fouling communities are transported along with their "host" structure. They may be introduced to new environments when they release eggs or young, or when they drop off the vessel. A recent study showed that between July 2003 and June 2005, ports on the U.S. West coast received over 260 million square meters of submerged commercial vessel surface area – more than twice the area of the city of San Francisco.

What are California's hull fouling requirements for commercial vessels?

The requirements for commercial vessels that operate in California waters fall into 2 categories: **Hull fouling removal and reporting form submission.**

1) Hull Fouling Removal

Fouling must be removed regularly, defined as any one of the following:

- a) No longer than by the expiration date (or extension) of the vessel's full-term Safety Construction Certificate

OR

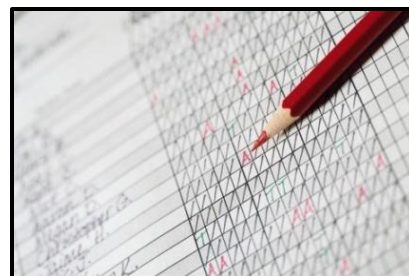
- a) No longer than by the expiration date (or extension) of the vessel's U.S. Coast Guard Certificate of Inspection,

OR

- a) No longer than 60 months (5 years) since the vessel's most recent out-of-water drydocking.

2) Hull Husbandry Reporting Form Submission

Commercial vessels must submit the Hull Husbandry Reporting Form (HHRF) **once each calendar year**, if operating in California waters during that year.





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Fouling Removal and Hull Husbandry Reporting (Cont.)

Where can I find the Hull Husbandry Reporting Form?

The form can be obtained on the Marine Invasive Species Program website, under "Compliance and Reporting Documents". See "Where can I find more information?" below.

Where do I submit the Hull Husbandry Reporting Form?

Email: BWForm@slc.ca.gov

Fax: 562-499-6444

Where can I find more information?

Internet: www.slc.ca.gov

- Click on the "Divisions" tab
- Select the "Marine Facilities Division" home page link
- Select "Marine Invasive Species Program"

Email: SciannC@slc.ca.gov • **Telephone:** 916-574-0209



Reports

Takata L., M. Falkner, S. Gilmore. 2006. Commercial Vessel Fouling in California: Analysis, Evaluation, and Recommendations to Reduce Nonindigenous Species Release from the Non-Ballast Water Vector. Produced for the California State Legislature.

California Code of Regulations

Title 2, Division 3, Chapter 1, Article 4.8. The Collection of Information Relating to the Hull Husbandry Practices of Vessels for Control of Marine Invasive Species in Waters of California